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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,745	12/13/2000	Kyou-Woong Kim	678-576 (P9645)	7547

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EXAMINER
MILLER, BRANDON J

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 11/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/735,745	KIM, KYOU-WOONG	
	Examiner	Art Unit	
	Brandon J Miller	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-16 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merriam in view Murto.

Regarding claim 1 Merriam teaches a method for controlling a paging alert level of a mobile station in a mobile communication system (see abstract and col. 2, lines 1-7). Merriam teaches setting information of a type and a level of a paging alert tone of a mobile station and generating, in a mobile station, a paging alert tone according to the information of the type and the level of a paging alert tone (see col. 7, lines 5-17 & 20-24). Merriam does not teach a broadcast channel message or transmitting a broadcast channel message from a base station to a plurality of mobile stations within a cell of a base station. Murto teaches a broadcast channel message and transmitting a broadcast channel message from a base station to a plurality of mobile stations within a cell of a base station (see abstract, col. 3, lines 44-50 and col. 4, lines 14-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Merriam adapt to include a broadcast channel message and transmitting a broadcast channel message from a base station to a plurality of mobile stations within a cell of a base station because this would allow unnecessary signaling caused by paging messages between a base station and a mobile station in a mobile communication system.

Regarding claim 2 Merriam teaches controlling a paging alert level of a mobile station in a mobile communication system having a base station, which transmits a signal to a mobile station (see abstract and col. 2, lines 1-7). Merriam teaches receiving information of a type and a level of a paging alert tone of a mobile station and determining whether a mobile station is located in a paging alert level-restricted area (see abstract and col. 7, lines 5-17 & 20-24). Merriam also teaches generating a paging alert tone according to information of the type and the level of a paging alert tone, if a mobile station is located in a paging alert level-restricted area (see abstract, col. 2, lines 1-7 and col. 7, lines 5-17 & 20-24). Merriam does not teach transmitting a signal to a plurality of mobile stations within a cell or receiving information of a paging alert tone from a base station through a broadcast channel. Murto teaches transmitting a signal to a plurality of mobile stations within a cell or receiving information of a paging alert tone from a base station through a broadcast channel (see abstract, col. 3, lines 44-50 and col. 4, lines 14-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Merriam adapt to include transmitting a signal to a plurality of mobile stations within a cell or receiving information of a paging alert tone from a base station through a broadcast channel because this would allow unnecessary signaling caused by paging messages between a base station and a mobile station in a mobile communication system.

Regarding claim 3 Merriam teaches a paging alert type distinguishable according to surrounding features (see abstract and col. 7, lines 5-17 & 20-24). Murto teaches a broadcast channel message that is distinguishable according to surrounding features of a base station (see abstract, col. 3, lines 44-50 and col. 4, lines 14-16).

Regarding claim 4 Merriam teaches rejecting restriction of a paging alert level designated within a predetermined time (see col. 5, lines 19-22). Murto teaches a broadcast channel message (see abstract, col. 3, lines 44-50 and col. 4, lines 14-16).

Regarding claim 5 Merriam teaches a mobile station display message indicating that a mobile station is presently in a paging alert level-restricted area (see abstract, col. 2, lines 40-41 and col. 7, lines 15-16 & 20-22).

Regarding claim 6 Merriam teaches generating an alert tone indicating that a mobile station is presently located in a paging alert level-restricted area (see abstract and col. 7, lines 5-17 & 20-24).

Regarding claim 8 Merriam teaches generating a paging alert tone according to a paging alert level designated upon receipt of an incoming call (see abstract and col. 7, lines 5-17 & 20-24). Murto teaches a received broadcast channel message (see abstract, col. 3, lines 44-50 and col. 4, lines 14-16).

Regarding claim 9 Merriam and Murto teach a device as recited in claim 2 except for automatically restoring a paging alert level to a paging alert level previously set by a user, when a mobile station moves out of a paging alert level-restricted area. Merriam further teaches proximity sensors that control paging alert levels when a mobile station moves in or out of a paging alert level-restricted area (see col. 6, lines 32-40 and col. 7, lines 1-16 & 20-24). Merriam teaches Merriam also further teaches a paging alert level set by a user (see col. 5, lines 64-67 and col. 6, lines 1-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Merriam and Murto adapt to include automatically restoring a paging alert level to a paging alert level previously set by a user, when a mobile

station moves out of a paging alert level-restricted area because this would allow a paging alert level to be controlled without user intervention.

Regarding claim 10 Merriam and Murto teach a device as recited in claim 9 except for displaying a message indicating restoration of a paging alert level preset by a user. Merriam further teaches displaying a message indicating a paging alert (see col. 2, lines 40-42). Merriam also further teaches proximity sensors that control paging alert levels when a mobile station moves in or out of a paging alert level-restricted area (see col. 6, lines 32-40 and col. 7, lines 1-16 & 20-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Merriam and Murto adapt to include displaying a message indicating restoration of a paging alert level preset by a user because this would allow a paging alert level to be controlled without user intervention and the notification thereof.

Regarding claim 11 Merriam and Murto teach a device as recited in claim 2 except for generating an alert tone indicating restoration of a paging alert level preset by a user. Merriam further teaches an alert tone indicating a paging alert (see col. 2, lines 40-42). Merriam further teaches proximity sensors that control paging alert levels when a mobile station moves in or out of a paging alert level-restricted area (see col. 6, lines 32-40 and col. 7, lines 1-16 & 20-24). Merriam also further teaches a paging alert level set by a user (see col. 5, lines 64-67 and col. 6, lines 1-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Merriam and Murto adapt to include generating an alert tone indicating restoration of a paging alert level preset by a user because this would allow a paging alert level to be controlled without user intervention and the notification thereof.

Regarding claim 12 Merriam teaches a method for controlling a paging alert level of a mobile station in a mobile communication system (see abstract and col. 2, lines 1-7). Merriam teaches generating, in a mobile station, paging alert class information according to the information of the type and the level of a paging alert tone (see col. 7, lines 5-17 & 20-24). Merriam also teaches setting a paging alert tone of a mobile station in accordance with received paging alert class information (see col. 7, lines 6-16 & 26-30). Merriam does not teach a broadcast channel message or transmitting and receiving a broadcast channel message from a base station to a plurality of mobile stations within a cell of a base station. Murto teaches a broadcast channel message and transmitting a broadcast channel message from a base station to a plurality of mobile stations within a cell of a base station (see abstract, col. 3, lines 44-50 and col. 4, lines 14-16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Merriam adapt to include a broadcast channel message or transmitting and receiving a broadcast channel message from a base station to a plurality of mobile stations within a cell of a base station because this would allow unnecessary signaling caused by paging messages between a base station and a mobile station in a mobile communication system.

Regarding claim 13 Merrian teaches determining whether a mobile station is in an alert level restricted area (see abstract). Merrian also teaches receiving paging alert class information to set a paging alert tone to a restricted mode if a mobile station is in an alert level restricted area (see col. 7, lines 5-17 & 20-24).

Regarding claim 14 Merrian teaches informing a user of a mobile station that a paging alert tone of a mobile station is set to a restricted mode (see col. 2, lines 40-42 and col. 7, lines 15-16 & 20-22).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merriam in view Murto and Rydbeck.

Regarding claim 7 Merriam and Murto teach a device as recited in claim 2 except for displaying an icon indicating that a mobile station is presently in a paging alert level-restricted area. Merriam further teaches displaying an alert indicating a mobile station is presently located in a paging alert level-restricted area (see col. 2, lines 40-42 and col. 7, lines 15-17 & 20-22). Rydbeck teaches an alerting icon that appears on a display of a mobile station when a message is received on an alternate paging channel (see col. 7, lines 36-38 & 49-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Merriam and Murto adapt to include displaying an icon indicating that a mobile station is presently in a paging alert level-restricted area because this would provide a mobile radio telephone that generates a variety of different signals to alert a user when a signaling message is received other than through a normal paging channel.

Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merriam in view of Murto and Hardouin.

Regarding claim 15 Merriam and Murto teach a device as recited in claim 14 except for alerting a user to accept or reject a restricted mode. Hardouin teaches alerting a user to a choice to change paging alert tone in a restricted mode (see abstract and col. 3, lines 35-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make

the Merriam and Murto adapt to include alerting a user to accept or reject a restricted mode because this would allow for a user to determine paging alerting information for different areas.

Regarding claim 16 Merriam teaches setting a paging alert tone to a restricted mode if a user does not respond within a preset time (see col. 5, lines 18-22). Hardouin teaches rejecting a restricted mode if a user rejects the restricted mode (see col. 3, lines 35-44).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Obayashi U.S Patent No. 5,566,358 discloses a mobile radio communication apparatus for registering a location.

Jeong U.S Patent No. 6,181,933 discloses a mobile communication system and controlling method thereof for paging and establishing dynamically paging area.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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October 31, 2002

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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